THE BRISTOL

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PUBLISHED UNDER THE AUSPICES OF

THE BRISTOL MEDICO-CHIRURGICAL SOCIETY.

EDITOR:
P. WATSON-WILLIAMS, M.D.

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"Scire est nescire, nisi id me
Scire alius sciret."

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The Bristol Medico-Chirurgical Journal.

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APRIL, 1917.

INTRODUCTION TO A DISCUSSION ON THE DIAGNOSIS OF TUBERCULOSIS.

BY

LATIMER JAMES SHORT, M.D., B.S. Lond., M.D. Brist., D.P.H. Cantab.,

County Tuberculosis Officer for Somerset.

I PROPOSE to limit my remarks to the early diagnosis of suspected cases of pulmonary tuberculosis in its strictly clinical aspect. This does not mean that I disregard any of the other methods or aids to diagnosis, for if one thing is now certain, it is that every possible aid which can be devised should be used when attempting to make what is frequently, after all, the most difficult diagnosis in medicine. It is extremely difficult, however, for many practitioners, especially those in scattered rural areas, to avail themselves of any but the simplest methods, and that is my reason for concentrating upon those points connected with physical examination which should receive special attention.

Whatever may be our various views upon the numerous methods of treatment now in vogue, it is very

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significant that every supporter of a particular line of treatment demands for its success that he shall be supplied with the *early* cases, and the importance of getting hold of these is obvious to us all. Unfortunately it is only too common even now to find that a practitioner only notifies a case or attempts to obtain any special treatment for it when it has already passed into stage 3. This appears to be sometimes due to his having treated the case for a long time without even examining the chest at all, or to a lack of appreciation of the significance of anything but the grossest signs. It is true, however, that many patients will not come for medical advice until they have already passed stage 1, and the only remedy for this which has been found to work well in practice is the systematic examination of all contacts living in the house with any notified case. It is usually from these, who may have no apparent symptoms at all, that the early stage 1 cases are found.

Part of the fault lies with medical writers, in that until quite recently the only cases described at all in medical literature are what are really advanced cases, and students are only made acquainted with these gross signs, and consequently when they do not find them in a patient they are inclined to rule tuberculosis out of the case.

It is now accepted that the duration from infection to termination of a case is far longer than was then recognised, and Sir Robert Philip considers that an average of ten years is by no means unlikely. When working systematically upon the school children of Edinburgh, he considered that he could recognise definite signs of tuberculosis by simple physical examination in no less than 30 per cent. of the children. The fact that a large proportion of these very early cases would get well without any treatment is not the question. Admitting this fact, they ought to be recognised and watched.

It may be useful to describe in detail the points which should be noted when dealing with the particular type of case which commonly arouses anxiety on the part of the practitioner, and most frequently leads him to refer the case for a second opinion.

TYPE A.

This group comprises those cases where there are either no symptoms at all, and the case is examined for some other reason, or the signs are the very indefinite ones of general poor health, with either a certain amount of chronic gastric trouble or nervous irritability, with or without a little chronic cough. Here, if there is any sputum at all, it should be carefully tested, if possible by the antiformin method or one of its improvements, and the examination should be repeated several times, recognising that a negative is of no definite value. Also the temperature should be regularly taken and charted, particular notice being directed to the difference between the figure on rising in the morning and at 6.0 or 7.0 p.m. After 7.0 p.m. the temperature is not of so much value.

The chest should be examined in a good light, when the patient has abstained from smoking for some hours, as a certain type of cigarette may cause distinctly confusing signs. On inspection it should be noticed whether the expansion is exactly equal both sides, and whether there is any flatness or hollowing at either apex. On the back a slight thinning of one trapezius should also be noted. On percussion there should be three fingers breadth of resonance above each clavicle, and if any difference, there should normally be slightly more resonance on the left than the right. The resonance also should not be too sharply cut off. Very light percussion is necessary, both above and below the clavicle, and any difference, whether it amounts to dullness or not, must be noted. It is common to get a slight diminution of

the note at the base of the same lung, which also suggests a tuberculous lesion.

A very interesting phenomenon recently re-described by Clive Riviere, which is probably purely reflex, and has no connection at all with the actual location of a lesion, is the appearance of two rather narrow horizontal bands of decreased resonance on the back, which he states can always be found if very carefully looked for in cases where there is any definite tuberculous lesion, the diminution being somewhat more marked on the affected side.

On auscultation there should be some alteration of the breath-sounds, either harshness or diminution, exactly corresponding to the site of the altered percussion note previously discovered, and any adventitious sounds, whatever their nature, must also correspond to the position of the dullness and altered breath-sounds. Sounds which do not correspond to other signs must not be given serious diagnostic value, but when they do correspond, even if they are exceedingly slight, they are of very serious import.

A very early sign insisted on by Sir Robert Philip is the presence of a chain of very small glands running down the anterior border of the sterno-mastoid. Posterior glands are of no value. A slight degree of myotatic irritability on the suspected side is a usual confirmatory sign.

TYPE B.

Chronic Bronchitis or Asthma, with some loss of flesh.—In this case the sputum must be *repeatedly* examined, as it is often the most important factor. Also, if the case is really one of tuberculosis, there must be some localised alteration in the percussion note, which is not given with a case of non-tuberculous bronchitis.

TYPE C.

Acute Pneumonia or Influenza.—Frequently at first one can do nothing but watch the case carefully and take regular

four-hourly temperature charts. If tuberculous, there will very soon be apparent a definite swing of at least 1½ to 2 degrees. It will also be found that the respiration rate is not increased correspondingly with the temperature, and that the patient's mental condition is far too clear or unconcerned. In fact, the more cheerful the patient with a high temperature the more likely is it to be tuberculosis. Within a week it is nearly always possible to find a definite localised alteration of the percussion note if the case is tuberculous.

TYPE D.

Typhoid or mental symptoms.—Here the suggestion is that the case is one of general or miliary tuberculosis, and the temperature may be either very irregular or sub-normal. Typhoid should always, of course, be thought of and watched for, but if general tuberculosis is present, the patient's mental condition is usually much duller than the temperature would suggest. It is possible to find some slight alteration in the percussion note in the chest, and usually the "feel" of the abdomen is quite distinctive.

TYPE E.

Pleurisy.—Where there is any clear fluid in the chest, and the cause is not quite obvious, it is tuberculous in 90 per cent. of cases, and the patient should be treated as such straight away, even if there are no signs of any other tuberculous lesion.

TYPE F.

Owing to the war a new difficulty has arisen, that in cases of gas poisoning, seen some weeks after the event, may present signs very strongly resembling pulmonary tuberculosis. It is not quite certain what causes the signs, but there can be very definite areas of localised dullness, with harsh breathing and even crepitations to match. Even if these are at the apex, however, it is usually possible to find some areas in other parts of the lung, and as the patient has

no temperature and the sputum is always negative, a diagnosis can eventually be made. Such cases, however, should be closely watched before a definite opinion is given, as it has happened that gas poisoning has lighted up an old infection which was previously unknown to the patient.

Experience has led me to the opinion that the above-described types of cases are those which cause most anxiety to practitioners, and I have tried to indicate the points on which I lay special value when such a case is referred to me for an opinion.

J. M. H. Munro, D.Sc. Lond., Lieut. and M.O. Som. Vol. Regt.

I have listened to Dr. Short's opening speech with the greatest pleasure and profit. A portion of the subject-matter was new to me, and a portion traversed familiar ground. For the former I am grateful, and with the latter I cannot find a single item of disagreement. For this reason, and because Dr. Short has treated so fully of the clinical examination, I shall be expected to deal rather with the laboratory aids to diagnosis. I carry about with me a somewhat heretical though strong impression that in the diagnosis of tuberculosis the consultant who devotes the greater part of an hour to inspection, palpation, auscultation, and percussion is at a great disadvantage compared with the general practitioner who can watch the patient under varying conditions.

Reflect for a moment on the difficulty often experienced in undoubted pulmonary cases in determining whether the lesion is absolutely limited to one lung. Here we are forced to rely on the usually superior clinical skill of the consultant, and neither laboratory methods nor the more ample opportunities of the practitioner in charge count.

Great as my hesitation often is when asked for an opinion after one examination whether such and such a young person is tubercular, I never feel otherwise than confident if I am allowed to watch the case for a time, and one rarely has to employ all the available methods before coming to a decision.

Of the ordinary aids to diagnosis the temperature chart, valuable as everyone admits it to be, is susceptible of further refinement. A naval officer, whose case I have already described,[1] invalided twice for spells of pyrexia, which subsided sufficiently under two or three weeks' rest in hospital. He came to me complaining of tiredness on exertion, quite a novelty for a man of his strength and activity. There was little else to go on. The most careful and repeated chest examinations left one in doubt; an excellent skiagraph received opposite interpretations from two experts; there was no sputum, and the officer had to return to duty. He kept a morning and evening temperature chart while on service, and on next leave again consulted me. On the strength of this chart and a suspicion as to one apex recorded by one of the several naval surgeons who had examined him, he obtained extended sick leave, and placed himself in my hands. Although the chest signs were still slight or wanting, the temperature was sensitive to exertion. An almost complete rest was ordered at first. For twelve months, having little else to do, he kept a most accurate and painstaking two-hourly (when awake) temperature chart, which, although limited in range, was characteristic. Very minute therapeutic doses of tuberculin (T.R.) were given at considerable intervals; they were such as would make no impression on an ordinary morning and evening temperature chart, but on the two-hourly one the slight temporary rise due to each was clearly shown.

[1] "A Disputed Case of Phthisis," read before the Bath Clinical Society, 1914.

After a time graduated exercise, still regulated by thermometer, was ordered, and the chest became almost normal. After another extension of leave, the case, which in its course was reviewed by no less than twelve Naval and Fleet Surgeons, came up for the important final decision, whether to invalid out of the Service for tuberculosis or to repudiate the tubercular diagnosis. The unique temperature chart, I believe, was largely responsible for the decision that the patient had been suffering from pulmonary tuberculosis, but was now cured. He was retained in the Service, and has endured all the exposure of patrol work in this war without suffering. The daily range of temperature is more important than the mean line. To emphasise this, and at the same time save space, I some years ago charted my tubercular patients in parallel vertical lines only, one for each day, the length denoting the extreme range. The chart thus forms a ribbon of varying width. Great and varying width, especially in regular waves, is as characteristic of tuberculosis as any one sign can be.

But it must not be forgotten that in rare cases the wide fluctuation is almost entirely below 98.4, the temperature rarely rising to 99. A retired doctor of great experience and quite unusual skill in examination brought me his married daughter with a chart of this description, which he said negatived the idea of tuberculosis, as there was no pyrexia, and she was habitually subnormal. She had been ailing a little, and he demonstrated to me slight right apical signs which might easily have escaped another observer. A skiagraph was rather reassuring as to the lungs, but showed a bronchial gland. Under treatment and a summer in Scotland health was re-established, and the temperature, which he had regarded as idiosyncratically subnormal, became perfectly normal.

Coming to laboratory methods of diagnosis, I am convinced

that in the future it is to these we shall have recourse if we are to attain any great success in combating tuberculosis at its inception.

The oldest laboratory test of all in this connection—examination of sputum for T.B.—has already rendered incalculable service by detecting tuberculosis in a fairly early stage (from a clinical standpoint), and in the cases following whooping-cough, bronchitis, and other catarrhal affections. In distinguishing from tuberculosis the broncho-pneumonic conditions giving rise to dubious clinical signs, we have in addition to the absence of T.B. from the sputum confirmation by the presence of the pneumococcus and the micrococcus catarrhalis; many casesof bronchitis, broncho-pneumonia, and " influenza " being simply acute or chronic infections of a portion of the respiratory tract by these two organisms.

The distinction is very important, because on it hinges divergence of treatment; and the diagnosis is difficult, especially in cases where (as I found with a relative of my own on my recent return from France) a relapsing pneumococcal catarrh re-awakens crepitations over the site of a healed tubercular cavity. But this method carries us no farther than the recognition or confirmation of a comparatively advanced stage of a tubercular lesion, for I regard as advanced the tiniest patch which the most expert clinician can demonstrate by auscultation and percussion. And the emphasis with which Dr. Short rightly enforces the urgency of an early *clinical* recognition of tuberculosis should, I think, attach to an equally urgent demand for a laboratory diagnostic sensitive to a *really* early stage of infection, one that would give us, say, 95 per cent. of cures with existing modes of treatment. In what direction may we look for this ?

Of the rough-and-ready methods based on the tubercular re-action—Calmette's Conjunctival Test, Von Pirquet's and

Moro's Skin Tests—I can only say that I very rarely employ them, and would advise those who think of doing so to read paper by my colleague, Dr. Leckie, in the *British Medical Journal May 16th*, 1914

When I wished, some two years before the war, to subject to parallel tests for tubercular and syphilitic complication or causation the numerous multi-arthritic cases admitted to the Royal Mineral Water Hospital (mostly shovelled in under the name of rheumatoid), I set these tests aside in favour of the temperature reaction to Koch's old tuberculin. This has the sanction of universal use in veterinary practice, and the slaughter of animals reacting to it has provided in the autopsies ample proof of its reliability. Testing in this way 70 cases with successive doses at a few days' interval of 1/1000th, 1/500th, 1/250th c.c. of O.T.—I never use larger ones—no less than 36 cases reacted with a rise of 1 °F. or more within forty-eight hours. If of these we consider only the 21 cases which reacted to the first dose, it appears to me incontrovertible that they contained active tubercular foci, either in the affected joints or somewhere else in the body, and that in either case valuable indications for treatment were obtained. All the cases had undergone careful clinical examination, and neither from this nor from their histories would tuberculosis have been inferred, excepting from one history of a scraped tarsus, and perhaps from one effusion into an olecranon bursa (this was absorbed after the first diagnostic dose of tuberculin). In suspected pulmonary phthisis I think great caution should be used in selecting cases to be tested in this way, and those in which I have personally used it might be counted on the fingers of one hand. There are two objections which seem valid: the dose given as the minimum for diagnostic results may yet be too large from a therapeutic point of view, and may set up an unfavourable turn; and, secondly, it may induce

a hypersensitiveness to the much smaller doses of tuberculin which one may contemplate as a course of treatment.

The war, which summarily put a stop to the investigations I have alluded to, has shown how laboratory methods of diagnosis may be exalted and refined to cope with an urgent necessity.

Anti-typhoid inoculation was general in 1914 in our Army, and as late as January, 1916, I was told of a large War Hospital in a distant county where the two pathologists, playing cards to pass the time, explained to my informant that there was little to do except a few sputa, because "the Widal test, you know, is of no use with these inoculated chaps."

Meantime, under the stress of necessity, what had happened at the front? Typhosus inoculation had been found effective as against typhoid, but the enterics coming into infectious diseases hospitals comprised a large percentage of Paratyphoid B. cases, and a considerable percentage of Paratyphoid A. As a consequence, inoculation with a triple vaccine, T.A.B., superseded the single inoculation in the British Army in the autumn of 1915, the French in January, 1916, and the Belgian in October, 1916. The bacteriology of the blood, stools, and urine as mainly responsible for these advances; but a less laborious and more uniformly successful means of diagnosis was urgently wanted, and was soon supplied by Professor Dreyer's brilliant work. He made the quantitative technique of the Widal test so simple and certain that reliable day by day curves of the agglutinating power of the patient's serum to standard cultures of typhosus, Para. A. and Para. B., could be obtained, in which the effects of inoculation, infection, and stimulation could all be traced, and in the majority of cases the diagnosis could be made from the curves alone. When I took up work

at the Anglo-Belgian Hospital receiving all the infectious cases from the Belgian front, I found that with typhosus-inoculated patients the method had for months almost superseded blood cultures and platings as a means of diagnosis. During my stay the T.A.B. inoculation was made compulsory, and I had the interesting experience of dealing with forty to fifty patients who developed enteric within a few days or weeks of the triple inoculation. Many of these had been infected just before inoculation, and the rest before the development of protection. Now these are the most puzzling of all to diagnose by serum examination, because the three inoculation curves are in full career, to these are superadded the true infection curve, and on this again is superimposed the group stimulation curve. I brought back with me all the charts of these special cases, which I had the pleasure of submitting to Dreyer, and in some test cases the diagnoses agreed to by us were confirmed by the results of plating the stools.[1]

The moral of this digression is that if blood-testing can be made to unravel so complicated a problem as that of the enteric group of infections, it is probably to it we must also look for a reliable and *early* (in the bacteriological sense) diagnosis of a tubercular infection. And were the urgency of the need as great as that caused by a war emergency, it is safe to say the problem would soon be solved. But as, apart from war needs, bacteriological research is about the last object in the world on which individuals or hospitals (not to

[1] The average number of enterics in the hospital rarely exceeded 100, but to place the daily agglutination testings on a basis of clockwork regularity an organised laboratory staff was necessary. This consisted of myself, a thoroughly competent and zealous chief assistant, a second assistant trained by him to be equally expert at this particular work, two orderlies at stated hours to do all the washing-up, a medical officer (generally the O.C.) to save my time by doing the vein-punctures for the day, and the dispenser to clean, sterilise, and supply the needles. The results were calculated and tabulated by the registrar.

speak of County Councils) will spend a superfluous halfpenny, I am not sanguine as to the immediate future. The agglutination reaction has certain difficulties in its application to the tubercle bacillus. The complement-fixation test promises much more, and if carried out, say, with the scrupulous technique described in Besson's work on bacteriological method will often be successful; but we need the volumes of work to be done on it in its application to tubercle that have been lavished on its application to the diagnosis of syphilis before we shall really know "where we are." With it remains the opsonic index, and in spite of neglect and a certain amount of obloquy, I am by no means certain it is not even now the best means we have of making an early diagnosis. As a guide to dosage in tuberculin treatment I have never employed or advocated it on an extensive scale, for reasons into which I need not enter. But I have had so many successes with it as a diagnostic method, that I always fall back on it when baffled in simpler indications. The technique requires a much greater amount of skill than Dreyer's agglutination method for enterics, but on the other hand yields results of greater quantitative accuracy. The main claims originally made, namely that the index is uniform and almost stationary in uninfected persons, variable from day to day in many infections, sensitive to tuberculin, to exercise, to massage, in all infections, are quite uncontroverted, and are verifiable by anyone who chooses to take the trouble to acquire the necessary skill. And I venture to say that in my opinion if all young people of suspicious family antecedents found to have a variable opsonic index to the tubercle bacillus were to be inoculated therapeutically with *small* doses of suitable tuberculin at intervals of a few weeks, more would be done in the way of cutting short really incipient tuberculosis than we can hope to accomplish by treatment of any sort

directed to the advanced lesions revealed by auscultation and percussion.[1]

J. C. MacWatters, M.R.C.S., L.R.C.P.

J. Courtenay MacWatters stated that in his practice he had learned to place very little reliance on the specific local reactions of Calmette, Von Pirquet, and Moro. The first was, he believed, attended with very serious risks, and the others were unreliable, chiefly on account of the fact that they were too sensitive, that such a large number of persons "reacted" who were free from active tuberculous disease, the explanation being that at some date they had been invaded by the Tubercle Bacillus and had developed the specific antibodies.

He expressed it as his practice to depend on the careful reviewing of all the points in the history of a suspected case, in conjunction with the most careful and extended observance of physical signs.

He thought the presence of infraclavicular myotatic irritability was a sign of very great value when more marked on one side.

As regards any specific reaction methods in diagnosis, he was quite convinced that the Opsonic Index was of the greatest value when a sequence of at least three observations were obtained before and after eliciting a specific response, either by inoculation with Tuberculin "B.E.," or by active disturbance of the circulation of the tissues suspected by exercise or massage, etc., any variation above 1.2 or below

[1] I would like to see arranged tests of the sera of a hundred such young people, without seeing them, *pari passu* with clinical examinations by an expert like Dr. Short. Though not a sporting man, I am open to wager (1) that a greater number of positives would be returned by me than by him, (2) that substantially all his positives would be returned positive by me.

0.8 being taken as very strong evidence of active tuberculous processes being present.

In early phthisis of children, where it was difficult to obtain sputum for examination, he had frequently been able to obtain the desired material by holding a small piece of gauze in a pair of forceps, or on the end of a wire, in the back of the throat while the child was induced to cough. By this means it was as a rule possible to obtain a specimen of phlegm adhering to the gauze from even a very young child.

He drew attention to those cases of chronic pneumococcal infection of the chest where the physical signs were strongly suggestive of phthisis, and laid some stress on the general appearance of the majority of phthisic children, their complexion, skin, eyelashes, and sclerotics, and on the presence of enlarged supraclavicular lymphatic glands most marked on one side even before definite signs were discoverable in the chest.

He concurred with Dr. Munro's opinion that as a rule where phthisis was discoverable by physical signs the disease was probably well in progress, and that it was only by specific blood examinations that we could hope to deal with the truly initial stages of tubercular infections.

H. CARLETON, M.D., Capt. R.A.M.C.

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1. The conception of early tuberculosis as a purely apical disease is probably untrue. The idea rests largely on the basis of *post-mortem* findings, which are not records of early pulmonary tuberculosis.

2. Appearances of good radiographs strongly support the view that early infection begins at and spreads centrifugally from the hilum of the lung, either as a retrograde spread through the peribronchial lymphatics or as a perbronchial aspiration infection.

3. This view of spread from the hilum is supported by consideration of the pathology of primary tuberculous pleurisy. The subpleural plexus of lymphatics connect for the most part directly with the lymphatics at the root of the lungs, and have but little connection with the peri-and inter-lobular lymphatics. Such pleurisies find their origin in disease at the root of the lung.

4. Spread against the lymph stream is no serious difficulty in accepting the above view, and it accounts for the gradual onset of the disease in most cases.

5. Of bacteriological methods, useful in early diagnosis, the specific precipitin reaction deserves further notice. As employed by Karl Spengler it is probably beset with fallacies.

NOTES ON PLAGUE IN BRISTOL IN 1916.

BY

LIEUT.-COL. D. S. DAVIES, R.A.M.C. (T.),,

Medical Officer of Health, Bristol.

SINCE the recrudescence of plague in 1894 the Port of Bristol was threatened in 1901, 1902, and 1909, but upon each occasion the infection amongst rats was not permitted to reach shore, and as ship-borne rat infection is the usual channel of introduction, watch over arrivals in the Port has been unceasing and vigilant.

Early in August, 1916, the disease unexpectedly appeared in the centre of the city, independently of Port infection, in a rag warehouse receiving no imported rags, but collecting only from adjacent counties.

Four cases in all occurred, all of which were directly connected with this warehouse, which contained two hundred

tons of rags, infested by rats and swarming with fleas. All the cases untimately recovered. Sixty-one rats were caught, alive or dead, on the premises, and of these six (three caught alive, three found dead) were definitely proved to have plague.

As the warehouse and its contents were obviously the focus of infection, it was decided to destroy by fire the whole of the contents. This necessitated elaborate precautions. The issue of rags was at once prohibited and work stopped. Food was supplied to keep the rats from migrating, while a staff of twenty-nine were inoculated against plague. When the staff commenced work, the bales of rags were first carefully netted round to prevent escape of rats, were then drenched with disinfectants, and conveyed in closed vans to one of the city destructors ; each bale had to be weighed and allowance made for weight of disinfectant, to estimate compensation. The work took ten days, sixteen tons of disinfectant were used, and two tons of lime.

Each person employed was bathed and his clothes baked after each day's work before returning home, to avoid carriage of infection by fleas ; the Health Committee's workmen were temporarily housed at the Central Disinfecting Station during this period. All persons employed at the warehouse were kept under supervision for six weeks, and affected houses and inmates were thoroughly dealt with to destroy all fleas, as bubonic plague in exclusively spread by these parasites.

A large area surrounding the district was mapped out, inspected in detail, and rat-catching systematically carried out for six months ; special attention was paid to rat-proofing the basements and to removal of wall food ; the riverside districts and the Port of Avonmouth were also searched for rats ; over 9,000 rats were caught, and of these nearly two thousand were examined at the University laboratory for plague. No plague rats were found in the Port or City other than those actually in the warehouse itself, and no further cases have occurred. No explanation has been forthcoming of this one-spot-infection in the centre of the city, which may have been accidental or intentional.

One interesting point is that on one of the plague rats in the warehouse, an ordinary brown or Norwegian rat, in place

of this rat's proper flea (*Ceratophyllus fasciatus*) there was found the flea (*Xenopsylla Cheopis* (Rothschild)) which properly belongs to the Indian black rat (*Mus Rattus*), and which is known as the plague flea. The Hon. Charles Rothschild, who confirmed this fact, points out that this species is a scarce vagrant to the British Isles, usually introduced by Port rats, and considers that the occurrence of this tropical flea in the British Isles is of great interest to entomologists and pathologists.

How did this tropical flea gain access to an English rat in the middle of an English city? Russell states that direct experiment has proved that a flea may remain infective for fifteen days, while Raybaud states that a flea may hibernate for a month without nourishment, during which time plague germs may persist unharmed in its stomach. Rosenau in quoting this statement adds: "This fact may be of importance for the transmission of plague to a distance."

CHRONIC APPENDICITIS IN ITS RELATION TO DYSPEPSIA.

BY

H. GOODWYN, F.R.C.S. Ed.,

Bovey Tracey.

I DO not claim any originality for my views on this subject, and it is with a view to emphasise the experience of others that I venture to record my experience. Some years ago Sir Berkeley Moynihan published a paper on this subject, and advanced the opinion that there was a very large number of cases of chronic and even acute dyspepsia that were directly dependent on an irritable condition of the appendix, whether as the result of acute or subacute attacks, or simply on some abnormal condition of the appendix and its surroundings, never sufficiently severe or definite to attract attention to that organ. Some time since Mr. Carwardine also drew

attention to this condition in a paper he published in the *British Medical Journal*, [which was illustrated with drawings showing the findings at operation], and especially to the presence in a number of cases of the so-called "Jackson's membrane."

It seems to be a matter not yet definitely settled as to whether this latter is of an inflammatory nature or congenital. In the several cases I have found it present I am convinced that it is pathological, but I do not wish to be decided on the point, as I have seen too few cases. This paper emphasised the importance of the connection between the appendix condition and the chronic dyspeptic troubles most of the cases were suffering from, and which were, in all the cases submitted to operation, either cured or greatly relieved.

It would be outside the scope of my paper to review the whole vexed subject of appendicitis, the arguments for or against operation, when to operate, etc. I merely wish to place on record my small experiences, in the hope that they may encourage a more extended trial of removal of the organ where there is any evidence at all pointing to its having some abnormal condition.

We might first ask ourselves why should an irritable appendix, which is not in direct relation to the stomach, give rise to trouble in that organ. I think the answer is to be found in the intimate connection of the sympathetic nervous system, the arrangements of Auerbach's and Meisner's plexuses in the coats of the small and large intestines, and the sympathetic nerve supply to the stomach itself.

The different types of ailments which present themselves may be very varied in severity, ranging from mildly persistent indigestion to even severe gastric hemorrhage, though the commonest type in my experience is that of chronic, intractable dyspepsia. Constipation; the constant need for aperients is a constant source of worry, until one might

almost think the case was one of gradually increasing obstruction. It is seldom that the ordinary treatment by drugs and diet is of much avail, and then they are only palliative. This brings us to the fact that all cases of intractable dyspepsia should have the appendix region carefully explored, both by abdominal and rectal examination, and that an X-ray examination with a bismuth meal should never be omitted, where possible, by an expert accustomed to this class of work. It is unnecessary to say that one would first endeavour to exclude all other possible causes of a more serious nature, such as gastric ulcer, duodenal ulcer, carcinoma of the stomach or other neighbouring organ, etc., etc., but the class of case to which I am alluding seldom or never presents serious symptoms. My experience extends over a period of six years, during which I have operated on a fair number of cases, all of whom have been cured of their dyspepsia.

It is unnecessary to quote all the cases, but the few following are sufficient to illustrate the points to which I desire to direct attention :—

1. Miss L. complained of attacks of vomiting and acute pain in the stomach, coming on at intervals of a fortnight or three weeks, and rendering her quite unfit for anything. She had marked tenderness on deep pressure over the appendix, no history of an acute attack, but these attacks had gone on for twenty years. At operation the appendix was found buried in the wall of the cœcum by membranous tough adhesions, and really at first one was inclined to think there was no appendix at all, it was so difficult to find. It was removed, and the recovery was uneventful. I asked her to write me six months after, and she told me she was quite free from all her former troubles, could eat anything, and had not felt so well for twenty years.

2. A. W. had frequently suffered from attacks of acute indigestion, lasting several weeks at a time. Medicine and diet only gave temporary relief. I was called to see him one night, and found him in great pain, vomiting, some distension, pulse 100, temperature 100 ; vomiting had been going on for some hours, and it was evidently either an acute appendix or acute obstruction. I operated the next morning, and found the

appendix firmly adherent at the tip to the abdominal wall up behind the cœcum, and a knuckle of intestine was being slowly obstructed, and the colour was dark purple. It was very difficult to free the tip, and the proximal end had to be detached from the bowel before the tip could be cleared. The recovery was uneventful, and now, a year after, he is perfectly well, free from all indigestion, and has gained two stone in weight.

3. Mrs. R. had suffered from indigestion all her life. Had all sorts of treatment—diet, teeth all removed and new set fitted; very constipated, and loathed her food; could only eat the simplest things, often had to go on a milk diet for weeks at a time. At operation a long, irritable appendix was found, and the greater part was enveloped in a membranous fold spreading over the cœcum (Jackson's membrane). This was separated and the organ removed. She is now quite well, and has put on over a stone in weight, and is able to eat anything, even roast pork, with impunity!

4. A. W. This case is of interest on account of the finding of a bristle in the appendix. The patient had been out of health for months, attacks of indigestion of varying severity, and loss of flesh. A point of deep tenderness over the appendix. Complete recovery from all symptoms after removal.

5. W. G. This was not a patient of mine, but was operated on in London by my advice for the same train of troubles common to most. He had attacks of acute vomiting, very poor digestion at any time, and was very thin. A bristle was found in his case also, and he is now a different man.

6. B. I. Complained of the usual chronic pain after food, no treatment had done her any real good, and on examination a point of tenderness was present. Appendix was very long and twisted, with bulbous end, small concretions in the lumen, and signs of old ulceration of the mucous lining. Removal caused all symptoms to disappear, and she is now in perfect health.

It would be tedious to quote further cases, and I hope those mentioned will be sufficient to show the value of operation in suitable cases. In conclusion, I would emphasise again the value of a careful examination of all the appendix region where intractable indigestion is a prominent symptom.

Reviews of Books.

Pulmonary Tuberculosis in General Practice. By HALLIDAY G. SUTHERLAND, M.D. Edin. Pp. xiv. 290. London: Cassell & Co. 1916. Price

As the title indicates, this book gives the modern conception of pulmonary tuberculosis as a systemic disease, with an account of clinical and biological methods of diagnosis and the rational treatment of the malady. One application of the facts is of considerable practical importance to general practitioners. "In practically every household, rich or poor, with a single case of aggressive or chronic infectious pulmonary tuberculosis, there are other cases waiting to be recognised. When the disease has been diagnosed in one member of a family all the others should be carefully examined. It is well to detect lessons when these are most amenable to treatment, and when that treatment may be represented by the simple rules of the physiological life."

Clinical Methods. By ROBERT HUTCHISON, M.D., F.R.C.P., and HARRY RAINY, M.D., F.R.C.P., F.R.S.E. Pp. viii. 604. London: Cassell & Co. 1916. Price 10s. 6d.

The sixth edition of this well-known guide to the practical study of medicine has been revised throughout. The most important changes are in the chapter on Clinical Bacteriology, which has been largely re-written by Professor James Ritchie. Several of the newer organisms, which have derived recent importance from their connection with the war, are dealt with; amongst them are the Bacillus dysenteriæ, B. tetani, Micrococcus rheumaticus, and the Diplococcus intracellularis of cerebro-spinal fever. The book has become increasingly useful to students who are commencing their clinical work, and it will be years before they have assimilated the mass of information it contains.

Traumatic Pneumonia and Traumatic Tuberculosis. By F. PARKER WEBER, M.A., M.D., F.R.C.P. Lond. London: Adlard & Son. 1916. Price 6d.

This reprint from the *Clincial Journal* (July, 1916) directs attention to a subject of much interest and importance, from its

connection with the difficult subject of compensation for accidents. It is too much the rule of judges and juries to ignore the traumatic element in cases of pneumonia and in heart cases. On the other hand, the writer was called upon some years ago to give evidence in court to the effect that a fatal pneumonia was not due to an accident, because it developed within a few hours of the injury ; the judge, however, gave a verdict in favour of the widow claiming compensation, on the ground that " when in doubt, give the widow the benefit thereof."

Common Disorders and Diseases of Childhood. By GEORGE FREDERIC STILL, M.A., M.D. Cantab., F R.C.P. Lond. Third Edition. Pp. xiii., 845. Henry Frowde, Oxford University Press. 1915. 16s. net.—We welcome a third edition of this work, which has, as the author states in his preface, been produced under difficulties in this time of war. In spite of these difficulties, however, Dr. Still has added a chapter on that little-understood disorder of childhood, " Cœliac Disease," and another on " Tuberculous Disease of the Cervical Glands." There has also been a revision of the other chapters, which now embody the latest advances in medical knowledge. The great value of the book, however, is that it is not only the outcome of the author's own vast clinical experience in meeting the many difficulties with which the practitioner is confronted in the daily routine of his practice when dealing with the common disorders of sick children, but includes also valuable criticism of the most recent work of other observers in the same field of medical science.

Urgent Surgery. By FELIX LEJARS, translated by W. S. DICKIE, F.R.C.S., and E. WARD, M.A., M.D., F.R.C.S. Vol. II. Third English impression. Pp. ix., 588. Bristol : J. Wright and Sons Ltd. 1915. Price 25s. net.—We have pleasure in commending the second volume of Lejars's original book, which is profusely illustrated, and its production is a credit to the author and to the publishers. Reverdin's needle appears to be in very general use. We observe that a circular wire suture seems to be preferred for fractured patella, although other varieties of suture are most commonly employed by British surgeons. There is a particularly useful chapter on " Injuries of Tendons," with numerous figures explanatory of the varieties of useful sutures which may be employed in these injuries. The volume comprises the consideration of injuries of the genito-urinary organs, the rectum and extremities, together with a section on hernia, and we welcome its appearance and congratulate the author and his collaborators.

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Editorial Notes.

Death of three Past Presidents.

It is with a deep sense of the loss to the medical profession in Bristol and the neighbourhood that we have to record within the short space of time covered by one issue of our *Journal* the loss of four of those who have enriched the work of the Bristol Medico-Chirurgical Society, three of them having held the office of President. We do not propose to touch on personal characteristics or qualifications here, for these our readers naturally turn to our Obituaries; but while each one has left his mark not only on our local medical life and in our affections, the names of Mr. Lansdown and Dr. Munro Smith seem to stir up distant

Memories of the last century.

Mr. R. G. Poole Lansdown followed his father, who practised in Bristol, and in the early sixties lived in Portland Square, on the side facing the church. He used to drive a yellow barouche, followed by a Dalmatian dog, and many of us can remember in the last quarter of the past century the late Dr. Henry Marshall's Dalmatian, without which his carriage seemed incomplete. But in the early sixties Portland Square was in the height of fashion, and many of the wealthier merchants and most successful practitioners lived there, besides which it was the place where the polling booths were located during Parliamentary elections, in those days not at all tame affairs.

Facing Mr. Lansdown's house, and next but one to the church, was another surgeon, Mr. William Ormerod, the father of our late colleague Mr. Henry Ormerod, of Westbury-on-Trym, who in turn has been succeeded by his son Mr. H. L. Ormerod, now in our midst. Another old Bristol doctor also lived in the Square, Dr. Fendick, whose son later practised in Clifton; and at the time we refer to Mr. W. D. Wills, the

original member of the well-known firm, lived in Portland Square. His brother's (Mr. H. O. Wills) house was in Somerset Street. Again our President's (Professor Edgeworth) name comes before us, for though his father practised before him in Cotham, his grandfather dwelt hard by Portland Square, at the bottom of Paul Street.

The loss of Lieut.-Colonel Munro Smith similarly recalls to us the name of his father, Mr. William Smith, Surgeon, who in 1848 practised in Park Street, and was a friend of Joseph Williams, who was in practice near Portland Square. Joseph Williams, an uncle of the Editor of this *Journal*, was a friend of Mr. William Smith. He devoted himself to the medical care of the poor stricken in the cholera epidemic, and was at supper with Mr. Smith the evening before he himself was attacked, and soon after succumbed to cholera. Joseph Williams was accorded a public funeral, and a beautiful memorial was placed over his grave in Arno's Vale Cemetery by the subscriptions mostly from the poor citizens, who recognised that he had given his life for them and theirs. An uncle of Mr. William Smith's wife, Mr. Isaac Leonard, Surgeon, lived in Brunswick Square in 1847, and was the father of Mr. Crosby Leonard, one of Bristol's noted surgeons.

These old-time memories bring up the name of the second Dr. Edward Long Fox, who descended from the Quaker family of Falmouth. True, his virile mentality would have abhorred the latter-day breed now mistermed "conscientious" objectors, but in this connection we may fittingly recall a very interesting episode towards the close of the eighteenth century. The great-grandfather of Dr. Long Fox, a certain Joseph Fox, of Falmouth, had shares in ships that turned privateers in the war with France. As a conscientious objector to a war of that character, he declined his share in the profits, amounting

to a large sum, and on the conclusion of peace he sent his son, Edward Long Fox (who became Physician to the Bristol Royal Infirmary in 1786), to Paris to restore to the French owners his share of what he deemed to be ill-gotten gains. The French Emperor was struck by his remarkable consistency, and conferred an honour, which, however, he declined on principle.

* * * * *

The CONSCIENTIOUS OBJECTOR, how different and degenerate is he to-day! He stands aloof when, without provocation, his brother is ruthlessly shot down, his wife and daughters murdered, or worse still, carried off to a slavery of the utmost depths of degradation; and not only leaves his fellows to give life and limb in defending the defenceless, but considers it beneath his Christian conscience, forsooth, to give a cup of water or bind up the wounds of those who are stricken while defending the objector's hearth and home, his wife and daughters, and precious self. We have yet to meet the objector who is consistent enough "to sell all his goods and give to the poor," or even to refuse all war profits on the goods he sells or the wage he earns. To medical men who, without invoking God and the Bible, as do the Kaiser and the conscientious objector, never heedlessly turn aside from healing the sores of even the most degraded sufferers, though their pains may be the direct result of their own misconduct, the cold and cruel disdain of the phylacteried Pharisee for the noblest of our race is altogether incomprehensible; yet maybe the feeding of swine, or similar work of national importance, suits better men of their kidney: or should we say "liver"?

This is your creed, to "turn the other cheek,"
Then turn it to your Master's stinging cord,
"Begin to be astonished," all ye meek,
Who do not cleanse His temple for your Lord.

Christ's word forbids you to defend the weak ?
Stay wrong on land and horror on the sea ?
Nay, let Himself your bitter judgment speak,
" Ye helped not them ? Depart, ye helped not Me."

G. I. W.

* * * * *

Honours.

We offer most cordial congratulations to the following colleagues and confrères, in every case conferred since our last issue, for work of exceptional merit :—

Colonel James Swain, on whom His Majesty has conferred the Companionship of the Order of the Bath, Military Division. He is at present visiting military hospitals and attending a special conference at the front in France.

Lieutenant-Colonel Michell Clarke has been elected a member of the Council of the Royal College of Physicians, London, a distinction not often falling to the lot of provincial Fellows. The University of Bristol must be gratified to find their Pro-Vice-Chancellor's meritorious work and personal qualifications have been recognised in this appointment.

Captain R. A. Fuller, R.A.M.C., of Long Ashton, has been decorated with the Military Cross, awarded " for conspicuous gallantry and devotion to duty. He led stretcher parties and tended the wounded under intense fire, displaying great courage and determination throughout the operations."

Captain V. B. Green-Armytage, R.A.M.C., has done excellent work in connection with the expeditionary forces in Mesopotamia, and has been decorated by H.M. the King of Serbia with " the Order of the White Eagle, with Swords " for his medical services at Kut.

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Ministry of Health.

We trust that the belief that Lord Rhondda will propose the creation of a Ministry of Health is well founded, for the proposal will certainly be welcomed by the medical profession if the powers conferred are practicable and in good hands. A Ministry of Health is not altogether a new proposal, for it has been urged before, though never with such authority as Lord Rhondda can bring to bear. And although, we understand, it will be brought forward as a war measure, and for the duration of the war, we have no doubt whatever that the Ministry of Health will become a permanent office of our Government. The appreciation of the work of the general practitioners, and the necessity for their work and interests being represented on equal terms with other aspects and departments of medical work, shows statesmanship and a grasp of the essential problems which such a Ministry ought to grapple with, so that we may look forward with confidence to its recognition as a factor of prime importance in national development.

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Plague Outbreak "Nipped in the bud."

A concise and pithy article by the Medical Officer of Health for Bristol, Lieut.-Colonel D. S. Davies, appears in this issue. Those who have any gift of imagination will realise how immense a service has been rendered by skilful applications of scientific knowledge and the untiring energy of Colonel Davies, and of all those who worked in conjunction with him, otherwise the outbreak would have very rapidly got beyond control, and spread far and wide into many districts where no such intricate machinery exists for preventing a further extension. Bristol, like Liverpool, London, and other great ports, has thus to render services national quite as much as, if not more

than, local. But this is by no means the first occasion that our M.O.H. has done brilliant work. Yet such a service is—like virtue—its own reward.

Let us see how the financial burden is distributed. We understand that the Bristol Health Committee were involved in an expenditure of no less than £4,000 on account of the preventive measures that had to be taken, and yet only £500 is to be contributed by the Local Government Board. The Ministry of Health will do useful work if more equitable arrangements are instituted, for it is difficult to understand why Bristol ratepayers should spend such large amounts in preventing a national outbreak, which would involve untold misery and immense cost to the nation. How curious it seems to be informed that the Board contended that it was the duty of Bristol to pay the whole cost, and that this grant must not be taken as a precedent. We hope not indeed !

It would be just as reasonable for the Admiralty to look to all seaport towns to provide all the cost of coast defence, and then contribute a small portion of the cost of an actual enemy attack.

* * * * *

Sir Alfred Keogh, G.C.B.

We offer our hearty congratulations to the Director-General of the Army Medical Services on the very high honour of the Grand Cross of the Bath recently conferred upon him. His most successful development of the Army Medical Services during war time is a magnificent contribution to the fighting power of the Empire, and very rare are the men who combine with such a charming yet withal tremendously forceful personality the necessary intellectual qualifications, the three essential qualifications of the born organiser.

* * * * *

Medical Students and the War.

SOME remarkable and interesting statistics furnished by the General Medical Council to the *British Medical Journal* afford food for reflection. These show that the actual number of male students in attendance on courses of instruction in preparation for medical degrees or diplomas are as follows :—

	First year.	*Second year.*	*Third year.*	*Total.*
England (including London) and Scotland	968	609	355	1,932
Ireland	481	378	217	1,076

In other words, the Irish school male students are more than half the number of those in all the schools of England and Scotland combined.

Yet when we turn to the *Medical Directory* we find that the numerical summary of the medical profession for 1917 shows that there are 30,838 in London, Provinces, Wales, and Scotland, and 3,193 in Ireland; that is to say, of qualified practitioners (including women) the proportion was less than one-ninth from Irish schools as compared with British, while the male students are now in the proportion of more than one-half in Irish schools as compared with British !

* * * * *

Restrictions on the use of Medicinal Glycerine.

THE Ministry of Munitions request us to announce that owing to additional demands for Glycerine for war purposes it has become necessary to place further restrictions on the issue of Medicinal Glycerine, and that supplies in future will be reserved for the manufacture of the preparations of the British Pharmacopœia, and for such uses of special

importance as may be sanctioned by the Ministry of Munitions. These supplies will, however, be small, and must be used with the utmost economy.

Applications for permit to obtain supplies should be addressed to: The Director of Propellant Supplies, 32 Old Queen Street, Westminster, S.W., and should give the following particulars:—

1. Quantity applied for.
2. Stock of Glycerine held.
3. Purpose for which supply is required. (In case of extra British Pharmacopœia preparations, formulæ should be given.)
4. Applicant's average yearly consumption of Glycerine for above purposes.
5. Name and address of proposed suppliers.

The Medical Profession have been informed of the need for economy in prescribing Glycerine, and it is anticipated that the requirements for dispensing will be greatly reduced. The stocks of Glycerine in the hands of Pharmacists should be sufficient to meet these reduced requirements, and therefore no Glycerine will be issued for dispensing meantime.

The surplus stocks held by Pharmacists, and all stocks held by retailers who are not in a position to use them for these restricted purposes, should be disposed of either to other Pharmacists who are short of stock, or to wholesale houses for making B.P. preparations.

New Drugs and Preparations for the Sick.

Vitafer (SOUTHALL BROS. & BARCLAY) is manufactured from milk with the addition of various glycerophosphates. It is stated to yield the following composition on analysis:—

Casein and Lactalbumen	85.0%
Milk Fat	2.0%
Inorganic Salts (mainly calcium phosphate)	7.5%
Glycerophosphates of Sodium	1.1%
,, Calcium	2.2%
,, Magnesium	2.2%
Carbohydrates, *e.g.* Sugar, Starch	absent
Purine producing substances	absent
	100.0%

We need not point out that such a food has many uses, or that it fulfils the purpose of food and tonic. It is recommended for administration in milk, cocoa, coffee, tea, porridge, etc., in fact any *non-acid* liquid food, hot or cold, as it breaks down in acid solution.

Lycresol (SOUTHALL BROS. & BARCLAY) is stated to be a mixture of cresylic acid and soft soap, containing fifty per cent. of free cresol. It should prove a valuable and efficient disinfectant for sterilizing instruments, as a douche or lotion in suitable dilution, and for general purposes.

Cystoforium (SOUTHALL BROS. & BARCLAY).—As a powerful urinary antiseptic and mild diuretic is indicated in infected conditions of the urinary tract. We understand that it is a compound of hexamethy lenetetramine with sodium acetate, with forty per cent. of its weight of the former. It may be prescribed in tablets, one to three thrice daily dissolved in water.

Hippurates of Ammonium, Lithium and Sodium (SOUTHALL BROS. & BARCLAY) have been introduced for the treatment of persistently abnormal high blood pressure due to various causes, where hitherto one has administered iodide of potassium or the nitrites. Their use seems less liable to cause depression than the iodides, while more prolonged in action and less active than the nitrite group.

Aldemint (SOUTHALL BROS. & BARCLAY).—We have become familiarised with the use of lozenges containing formaldehyde as an antiseptic in various conditions of the mouth and pharynx. The tablets introduced to our notice are pleasant, and will be found of great utility in suitable cases.

ROBERT ROXBURGH, M.B., B.Ch., F.R.C.S.E.

Obituary.

ROBERT ROXBURGH, M.B., B.Ch., F.R.C.S.E.

WHEN Robert Roxburgh settled in Weston-super-Mare almost forty years ago, it was to succeed to the physician's practice of his brother-in-law, Dr. Frederick Gourlay, who had just then died. It was of a kind which made demands of no ordinary qualities, for Dr. Gourlay's magnetic personality had attracted patients who were extraordinarily responsive to the influence of a high and noble character.

To the comparatively young student, fresh from the Edinburgh training, and with added experience of the Vienna and Leipzig inspiring research work, it was a quite new experience to adjust himself to the new values of life disclosed in a physician's practice, and it was not without its possibilities of failure. How well and how courageously he adapted himself to novel conditions and new surroundings those of his friends who survive him can remember with admiration. The claims of his practice left him little time to continue pathological and bacteriological work in which he had been so keenly interested, and social demands—for was he not a welcome guest everywhere ?—made great inroads on his leisure. Then, too, he threw himself with characteristic energy into every movemen which had for its aim the welfare of his fellow-townsmen. Himself an accomplished musician, he helped its conductor to foster the local Philharmonic Society from insignificant beginnings into a well-ordered and most capable body of executants. And so with many other enterprises.

Dr. Roxburgh was President of the Bath and Bristol Branch of the British Medical Association in 1912.

His chief public work lay with the Weston-super-Mare Hospital. As Honorary Physician up to the time of his death, he achieved work of untold value. His out-patient room was always crowded because it was " his day," and although it was not incumbent on him to do this work, it was never hurried, and frequently he had only finished in time to hurry home to dinner After the commencement of the war, owing to the depletion of the hospital surgical staff, he gave his services as an anæsthetist at operations, frequently remaining until a late hour of the night.

As Consulting Physician to the Royal West of England Sanatorium, he found more work whenever his ripened skill was needed. It was always work with very little real leisure. His holidays were usually yachting cruises off the coast and in the

lochs of his beloved Scotland. On these occasions his invitations were to congenial friends to join his family party.

About four years ago he lost his wife after a serious illness. He never seemed to be the same afterwards. Latterly his friends noticed the tired and worn expression he wore. It was clear to many that he was over-working, and at last the breakdown came, and after a short interval the end.

The writer remembers how he loved to speak of the happy days and experiences at Edinburgh, and of the distinguished members of his profession with or under whom he had studied. Lister was his hero ; he had at one time been his dresser, and many were the interesting experiences he would recount.

The loss to Weston-super-Mare by Dr. Roxburgh's death at the age of 63 is great. He was a wise physician, a true friend, and a man who thought and acted as one to whom all things that were pure and lovely and of good report were no mean ideals for the standard of a life to be well lived.

GEORGE MUNRO SMITH, M.D. Bris., L.R.C.P., M.R.C.S.

GREAT was the shock, and much the grief, when it was first made known that Dr. Munro Smith was suffering from an incurable disorder. It was known to himself and some colleagues that for a year or two he had patiently put up with much discomfort from some internal trouble, but when, in a tragic manner whilst operating, he fainted and was taken home ill, it was evident that the strong man was failing, that something serious was going on, and when a few days later we heard that the operator could do no more than relieve by colotomy, it was evident that Munro Smith's days were numbered.

Born in 1856, he died at his house in the Apsley Road on January 13th, 1917, at the comparatively early age of 60, in the prime of life, and with many possible years of useful activity before him. The son of a medical man, he chose his own medical career, and living in Clifton, he naturally was educated at the Clifton College. Much of his future success was doubtless founded on this early training, and his teachers there would have encouraged the indications they found that he was a born naturalist, and a painstaking worker in many other fields of activity.

Afterwards he joined the Bristol Medical School, and there he soon showed his interest in the profession of his choice. He won the Clarke Scholarship, gained the Suple Gold Medal in Medicine and Surgery at the Bristol Royal Infirmary, and was prizeman in various subjects. His medical student's career began in 1873, and afterwards he became medical tutor, and

LIEUT.-COLONEL GEORGE MUNRO SMITH,
R.A.M.C. (T.).

was Demonstrator in Physiology from 1881 to 1887. He then wisely decided to attend a course or courses of Physiology at University College, London, where the work of Sir J. Burdon Sanderson and Drs. Klein and Foster was attracting much attention. There he worked in the laboratory preparatory to his appointment as Lecturer in Physiology to the Bristol Medical School from 1887 to 1893, when he became Professor of Physiology in the University College, Bristol, from 1893 to 1899.

From his early student days he had been connected with the Bristol Royal Infirmary, and from that time onward was always associated with the work of that Institution. From 1889 to 1897 he held the office of Assistant Surgeon, when he became full Surgeon, which office he held for a further term of eleven years, resigning in 1909. During this period he was most faithful in attention to the duties of his offices, and large numbers of patients must have cause to be grateful for his skill and devotion. He was then appointed Consulting Surgeon, which office he continued to hold as long as he lived. He was accordingly connected with the Institution for a period of nearly forty years.

He was held in much esteem by his colleagues and medical friends, and his work was much valued by the students with whom he was so much in contact, for he had long learnt the value of a close and sympathetic relationship between professor and student, and he had the power of winning the affection and confidence of these young men, so greatly aiding in the development of character in the undergraduate. His personality was great, his sympathies were wide and varied, he was a good lecturer, clear in his demonstrations, keen in the service of science, and a naturalist of considerable repute. His devotion to duty was one of his great characteristics which made him popular with his patients and colleagues.

He was President of the Bristol Naturalists' Society in 1910, 1911 and 1912, and wrote many papers for the Society's *Journal*. Of this aspect of his work Mr. C. King Rudge writes as follows : " George Munro Smith was a true lover of nature, a born field naturalist, an accurate observer, and a careful interpreter of facts. He was specially interested in the birds of the Bristol district, more particularly our rarer summer and winter migrants, the nesting of many of which he has recorded in this locality. He was elected a member of the Bristol Naturalists' Society in 1882, and from that time onwards—a period of thirty-five years—he took the keenest interest in the work of the Society, reading many interesting papers at the General Meetings on various subjects. He also frequently exhibited objects of interest, and joined in the discussions at the meetings. Many of his observations and notes on bird life were made on the Downs, the Avon banks, and the flats and marshes by the

Severn shore. Being a skilful photographer, he was often able to illustrate his papers by well-chosen lantern pictures of birds and their nests.

"Munro Smith will be greatly missed at the meetings of the Bristol Naturalists' Society, where his cheery personality, and ready wit were always appreciated by his fellow-members."

His appearance at the meetings of the Medical Dramatic Society was always greatly welcomed, as he was an accomplished actor, especially in parts which gave scope for the manifestation of his natural humorous talents.

He wrote many papers, several published in the *Journal* of the Bristol Medico-Chirurgical Society. Two of these are of especial note, the "Vis Medicatrix Naturæ," this was the Presidential Inaugural Address of the Annual Meeting of the Bath and Bristol Branch of the British Medical Association, 1909, and the other was entitled "The Medical Life," an address given at the opening of the 29th session of the Bristol Medico-Chirurgical Society. In the meetings of these Societies he took much interest, was rarely absent from them, and in due course became President of both. These addresses are teeming with humour, and were much enjoyed by those present, in fact it was always expected that if Munro Smith was asked to give any sort of address or after dinner speech that it would be quite the event of the occasion; it is no exaggeration to say that he was truly a "born wit." He was not a voluminous or tedious writer, but the list of papers appended shows that his pen did much useful work and was frequently in demand.

The great work which has occupied the last year or two of his life is one which has yet to be published, but is of considerable note. It is no less than *A History of the Bristol Royal Infirmary*, a handsome volume of some 500 pages, which the author was fortunately able to finish before his health failed him, and which will be a valuable record of the foundation and history of an Institution which is one of the oldest provincial hospitals of this country. It is founded mainly on a bulky row of volumes, fourteen in number, labelled "Biographical Memoirs," which were compiled by the late Richard Smith, who was Surgeon to the Infirmary from 1796 to 1843. Munro Smith states in the Introduction that "it appeared to me that if these memorials of bygone times could be brought from their retreat into daylight, and be put into some kind of sequence and order, they could not fail to be of interest to many, not only as a history of a great charity, but as a means of looking with the eyes of a keen observer into the vivid life of an eventful epoch." The Committee, recognising his devotion to the Infirmary and his unique knowledge of the Institution for so many years, asked him to undertake this duty, which he consented to do. The volume was, however, delayed by the war, but the author had done his

work, and this History will be a lasting memorial of his labours.

Of late much of his time had been taken up with work for the army. As one of the officers of the 2nd Southern Hospital, he was called up for duty at the commencement of the war, and the heavy addition to his work entailed by the office of Lieut.-Colonel, R.A.M.C.T., necessitated daily attendance for many hours at the Southmead War Hospital, where he devoted himself heartily to the patriotic work of the treatment of the large number of wounded soldiers which passed to his care. It must have been an arduous task to carry out such a charge becoming a commissioned officer, with various rights, privileges and duties, and yet continue to carry on the usual hospital work and that of private practice as heretofore, but Munro Smith did all this with credit to himself and to the satisfaction of his senior officers. His old friend and life-long colleague, Lieut.-Colonel Paul Bush, in command of the Second Southern Hospital, writes that he was one of the first to join the Territorial Force when inaugurated, and with the onset of war he was from the first most active in the work. "It was most noticeable how readily he adapted himself to the conditions and demands of military service, and was always ready to fall in with duties which are in many respects so different from those we are accustomed to in civil life. He was a most genial and helpful colleague, of whom it is difficult to speak too highly, and I personally mourn his loss as one of my oldest friends."

We often hear of the word "fame" in connection with medicine; but Munro Smith himself remarked in his address to the Medico-Chirurgical Society, "The fame acquired in our profession does not as a rule last very long." It is often said that, especially in army work, "this is now the day of young men," the old doctor is not so much in request. As was said by Rockwell (*Med. Rec.*, 1916, ii. 1109), "Great physicians seem to loom up larger in the past than in the present," but nevertheless our lost friend, George Munro Smith, will be held in grateful memory, which will be kept alive for many years in many grateful hearts through a large circle of friends, patients, and colleagues, by whom he will be greatly missed, and we may all hope, as he says, to

> "join the choir invisible
> Of those immortal dead, who live again
> In lives made better by their presence."

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FRANCIS POOLE LANSDOWN, M.R.C.S., L.S.A.

It is with a deep sense of the loss sustained by the medical life of the city that we record the death of Mr. Francis Poole Lansdown, Consulting Surgeon to the Bristol General Hospital, which occurred on the 12th February, 1917, after a short illness, at the ripe age of 83.

The name of Lansdown appears far back in the city annals. In the Great Red Book of Bristol is a record of the sale by Thomas Lansdown, of Bristol, of a house in Maryleport Street, 1542. Again, Will. Lansdowne (*sic*), chirurgeon, was admitted to the freedom of the city, for that he was apprenticed to John Webb, 1699; and further, Thomas Lansdown, barber-chirurgeon, was admitted to the freedom of the city, apprenticed to John King, 1689. A paternal aunt of Mr. Lansdown, born in 1800, was presented, on her marriage to Mr. Richard Blogh in 1836, with a framed pictorial acrostic of considerable local interest, executed by Stephen Jenner, brother of Edward Jenner, with whom the Lansdowns of that date were intimate.

Francis Poole Lansdown was born in 1833 in St. James's Barton. Upon his marriage he lived for some time in Lower College Green, where he secured a large private practice amongst the cathedral dignitaries. He subsequently moved to Park Street, then a residential street, and thence to Whiteladies Road, which he left only to retire to his beautiful Devonshire home at Lydford on Dartmoor. He had always taken great interest in his garden at Clifton, and met with considerable success as

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an amateur fruit-grower, a pursuit which continued to afford him pleasure and employment to the end.

The Lansdown family has been closely associated with the Bristol General Hospital since its opening in November, 1832. Some houses in Guinea Street first afforded a home to the Institution, until the growing needs of the district led to the erection of the Hospital on the present site. One of the first surgeons to be appointed was Mr. Joseph Goodall Lansdown, who had for his surgical colleagues G. D. Fripp, Henry Brigstocke, and John Grant Wilson. He was re-elected from time to time, and finally resigned in April, 1861, after twenty-nine years' continuous service, to be succeeded by his son, Francis Poole Lansdown, who in his turn gave thirty-two years' faithful service to the Institution. Three years later his son, Robert Guthrie Poole Lansdown, was elected Hon. Surgeon to the Hospital, a post he still holds. The office of Surgeon to the Bristol General Hospital has thus been held by three successive generations of the Lansdown family, and as Mr. F. P. Lansdown was placed on the honorary consulting staff of the Hospital on his retirement in 1893, there has been an uninterrupted period of more than eighty-five years during which the family has been officially connected with the Institution. The surgical family tree still blossoms, for a member of the fourth generation is now a student of Guy's Hospital, to carry on the tradition.

"As a surgeon," one of his colleagues writes, " he was a calm, careful, and skilful operator, taking no unnecessary risks ; his opinion in surgical cases was sound, and he kept himself well abreast of the surgery of the day." He held several public appointments, including the post of Surgeon to the Post Office and to the City School, which he retained until his retirement.

Mr. Lansdown found little time for sport, though horse-exercise was always grateful to him when time permitted. As with many busy men who work in the crowded life of cities, when on holidays bent he found " society, where none intrudes, by the deep sea, and music in its roar." As July came round each year he would take ship from Bristol or London Docks for a three weeks' cruise to Ireland or the coast of Scotland. Putting in, perchance, at Plymouth, a walk on the Hoe and a bathe were preparation for continuance of the voyage. Sometimes his family accompanied him, and beguiled his footsteps to Killarney Lakes or Bantry Bay, but he usually kept closely to the ship's track, and was punctilious in returning home, for inscrutable reasons, always in time for the August Bank Holiday.

Mr. Lansdown took small interest in medical politics, and seldom attended the Annual Meetings of the Association, but he was keenly interested in, and frequent attendant at, the meetings of the local medical societies, of which he was in turn President. He was also for many years a member of the Clifton

Medical Reading Society, and contributed to the medical journals some valuable notes on the treatment of Aneurism.

Mr. Lansdown will be always remembered socially for his genial and friendly nature, and for the help and encouragement he was ever ready to extend to the younger members of the profession. What better memorial could one hope for than this, that the remembrance in many hearts of kindly deeds may serve to keep his memory green.

F. ST. JOHN BULLEN, M.R.C.S., L.R.C.P.

A SKILFUL physician and cultured gentleman of a most loveable disposition has passed from our midst by the death at the age of 54 of F. St. John Bullen. He was born at Kennington, the son and grandson of medical practitioners, and was educated at St. Thomas Hospital School, qualifying in the year 1885. After holding a resident post at Evelina Hospital, he was appointed Pathologist and Medical Assistant at Wakefield Asylum, and remained there seven years, during which time he did much original work of high value.

In 1884 he came to practise at Clifton, and married a daughter of Mr. Heber Mardon.

St. John Bullen was a man of many parts. His special knowledge of mental diseases and psychology was of great value to our *Journal*, especially in critical reviews of works on these subjects.

As a musician he had few peers amongst amateurs, and would have done credit to the musical profession had he made that his career. He was a highly skilful pianist and organist, and played the violin and viola. Whilst at Wakefield he conducted the Wakefield Orchestral Society, and composed and arranged for orchestra many works, and in later years at Bristol he assisted at many orchestral concerts.

Architecture, more especially church architecture, claimed his attention, and his knowledge on these subjects and of archæology was extensive.

His health began to fail about two years prior to his death, suffering from progressive muscular atrophy. He bore the steady and pitiless progress of the disease with extraordinary gallantry, and never lost his cheerful disposition even to the last, when the end came suddenly.

He was a man who made friends rather than acquaintances, and enemies never; truly a man without guile.